## Introduction

## 1.0 General

The consultant, Hoyle, Tanner and Associates, Inc. (HTA), was awarded a contract by the city of Concord to complete an update to the March 1996 Airport Master Plan Update (AMPU)<sup>i</sup> for Concord Municipal Airport. The preparation of this document was financed jointly by the city of Concord, the New Hampshire Department of Transportation (NHDOT) – Aeronautics Division, and the Federal Aviation Administration (FAA) under the provisions of the Airport Improvement Program (AIP).<sup>ii</sup> This master planning effort took place between July 2004 and May 2006. The purpose of this AMPU is to:

- Provide a comprehensive update of the 1996 master plan and airport layout plan;
- Identify future activity levels over the next twenty years;
- Identify key facilities that require upgrading to meet future activity and to comply with FAA criteria;
- Review the functional and size adequacy of the terminal building and it's location and make recommendations for improvements;
- Assess roadway access issues and make recommendations for improvements;
- Identify future airport development options in regards to aircraft storage and automobile storage;
- Incorporate the natural resource management plan in to the airport layout plan (ALP);
- Consider security enhancement as part of facility development plans;
- Identify corporate aircraft needs as to runway length and ramp parking areas;
- Identify potential environmental impacts associated with future development;
- Recommend an enhanced airport management structure and review the adequacy of airport revenue generation;
- Develop a twenty-year capital improvement plan (CIP) and airport financial plan identifying key factors contributing to the airport's current self-sufficiency and discuss the outlook for continuation of that condition;
- Insure a broad public involvement in the planning process;
- Provide a Storm Water Pollution Prevention Plan (SWPPP) for the airport; and
- Complete an economic impact analysis to show the economic impact/benefit the airport has on the city of Concord.

According to FAA Advisory Circular (AC) 150/5070-6A, Airport Master Plans, the goal of a master plan is to provide guidelines for future airport development, which will satisfy aviation demand in a financially feasible, environmentally responsible manner. In order to insure these results for Concord Municipal Airport the city manager; city officials from the Community Development Department, Engineering Department, General Services Department, Business Development Department, and Finance Department; the airport manager/fixed based operator; members of the NHDOT, FAA and the New Hampshire Army National Guard; regional planning representatives, public citizens, and representatives of environmental concerns acted as a review group responsible for providing input and insight on issues that were addressed in the master planning process.

The twenty-year plan for development of Concord Municipal Airport, determined during the airport master plan update process, is represented in *Chapter 6 - Economic Impact Analysis*, *Capital Improvement Plan & Airport Operations and Finances*. The short-term phase represents more detailed plans as they are broken down by individual fiscal years and prioritized during the master plan process and through recommendations made by the airport's consultant. The long-term phase only includes a list of projects to be completed within the long-term, twenty-year planning period.

## 2.0 Airport Master Plan Update Report Summary

This report consists of a six chapter technical report and a package of eleven drawings, which comprise the Airport Layout Plan (ALP) set.

**Chapter 1** is an inventory of Concord Municipal Airport, which is the collection of data pertinent to the airport and the area it serves. The objective of the inventory is to provide background information for subsequent phases of analysis and a "snapshot" of the airport's baseline conditions as of September 2004.

**Chapter 2** contains forecasts of future activity at the airport, which estimate moderate levels of growth by the same types of aircraft over the next twenty years. The critical aircraft used throughout the master plan for facility planning purposes is the Cessna Citation II.

**Chapter 3** reviews the airside and landside facilities to determine if they can accommodate the projected planning activity levels, the critical aircraft, and known airfield issues. This chapter identifies key facilities that require upgrading to meet future activity and to comply with FAA criteria. Alternatives for development and the preferred development options are provided within this chapter.

Chapter 4 provides a summary of the environmental impacts associated with the future development recommendations.

**Chapter 5** includes reduced-size copies of the ALP drawing set. There are eleven drawings, which include:

| • | Cover/Title Sheet                  | Drawing 1 of 11  |
|---|------------------------------------|------------------|
| • | Existing Airport Layout Plan (ALP) | Drawing 2 of 11  |
| • | Ultimate ALP                       | Drawing 3 of 11  |
| • | Ultimate ALP Data Sheet            | Drawing 4 of 11  |
| • | Topographic Plan                   | Drawing 5 of 11  |
| • | Terminal Area Plan                 | Drawing 6 of 11  |
| • | Runway 17-35 Plan and Profile      | Drawing 7 of 11  |
| • | Runway 12-30 Plan and Profile      | Drawing 8 of 11  |
| • | Federal Aviation Regulation (FAR)  |                  |
|   | Part 77 Airspace Surfaces          | Drawing 9 of 11  |
| • | Land Use Plan                      | Drawing 10 of 11 |
| • | Sign Plan                          | Drawing 11 of 11 |

The primary facility development outlined in the plan is available for review in *Drawing 3*, *Chapter 5 – Airport Plans*, of this master plan report.

**Chapter 6** presents a staging plan and a financial plan required to implement the future development identified in previous chapters. The staging plan considers the demand-driven need for facilities, as well as the financial feasibility of construction. The financial plan evaluates the airport's resources and

proposes revenue improvements. An Economic Impact Analysis as well as recommendations for an enhanced airport management structure are also identified within this chapter.

As part of the airport master plan update grant, a Storm Water Pollution Prevention Plan (SWPPP) was developed. Although the SWPPP is referenced within this master plan, the document is a separately bound, stand-alone document. The SWPPP is available in the City of Concord's Community Development Department as well as the fixed based operator's office, Concord Aviation Services.

## **Endnotes**

Rist-Frost-Shumway Engineering, P.C. in collaboration with Greiner, Inc. and Applied Economic Research, *Concord Municipal Airport Master Plan Update*, Rist-Frost-Shumway Engineering, P.C., Laconia, New Hampshire, March, 1996.

<sup>&</sup>lt;sup>ii</sup> U.S. Department of Transportation, Federal Aviation Administration, *Airport Improvement Program Handbook, Order 5100.38B*, Change 1, U.S. Government Printing Office, Washington, DC, January 8, 2004.

U.S. Department of Transportation, Federal Aviation Administration, *Airport Master Plans, AC No.* 150/5070-6A, U.S. Government Printing Office, Washington, DC, 1985.